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ABSTRACT

Past studies which have examined need levels have identified individuals as functioning at specific need levels without an adequate assessment of the intensity of each need or a clear comparison with other need levels. To address these issues, a self-report inventory using a modified paired comparison format was developed to assess need potencies within individuals. The inventory, based on Maslow's theory of the hierarchy of needs, permits both multiple comparisons of items from each need level with each other and an assessment of the intensity levels of each item. College students (N=47) and faculty members (N=12) responded in percentages to choices between paired items in the area of physical, safety, belongingness and love, esteem, and self-actualization needs. The reliability of the inventory was evaluated by examining the degree of consistency of items designed to measure the same need. Correlations ranged between .52 and .65. The mean potencies of each need level were determined and an analysis of variance revealed that the differences between need levels were significant. Need level, as measured by the intraclass correlation, were significant and indicated that ideas at each level were measuring the same construct. (NRB)

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USING PAIRED COMPARISONS TO ASSESS MASLOW'S HIERARCHY OF NEEDS

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Abstract

Based on Maslow's motivational theory, a self-report inventory utilizing a modified paired comparison format was developed to assess need potencies within individuals. This method permits both multiple comparisons of items from each need level with each other and an assessment of the intensity levels of each item. Fifty nine individuals participated in the study. The reliability of the inventory was evaluated by examining the degree of consistency of items designed to measure the same need. Correlations ranged between .52 and .65. The mean potencies of each need level were determined and an analysis of variance revealed differences to be significant in the predicted direction.

Using Paired Comparisons to Assess Maslow's Hierarchy of Needs

Maslow's theory of a hierarchy of needs (Maslow, 1954, 1968) provides a useful and intriguing structure for understanding human motivation. A lack of concrete definitions and specific examples of each need level is a drawback when applying the theory to research or clinical situations. Prior research investigating need levels has struggled to define specific needs while employing a variety of methods to assess them, including interviews (Hall & Nougain, 1968; Lollar, 1974), rank ordering of needs (Goodman, 1968; Porter, 1961), rating of needs (Haymes & Green, 1982), and forced choices (Mathes, 1981). A common problem in the above studies is the fact that subjects or judges must make an "all or none" decision regarding need levels. Thus individuals are identified as functioning at specific need levels without an adequate assessment of the INTENSITY of each need as well as a clear COMPARISON with other need levels.

The present investigation seeks to address these issues by employing a modified paired comparison approach. This method permits both multiple comparisons of items from each need level with each other and an assessment of the intensity levels of each item in comparison.

Method

Subjects

Fifty nine individuals, 38 males, 21 females participated in the study. Forty seven were enrolled in introductory psychology courses and 12 were faculty volunteers from a variety of departments.

Items

Initially twelve items were written to exemplify each of the five basic need levels identified by Maslow. These were then independently judged for need level appropriateness and social desirability by three faculty who teach a graduate seminar in personality. The four items at each need level that were finally selected had the highest rating for appropriateness and viewed as comparable in terms of social desireability. The following items were employed:

Physiological Needs

1. Feeling Sexually satisfied. 2. Sleepng well and waking up refreshed. 3. Feeling physically fit and healthy.

4. Eating and drinking what I want when I want it.

Belongingness and Love Needs

1. Sharing my joys and sorrows with someone. 2. Knowing my friends really care about me. 3. Being part of a family (or other close group) that cares about me. 4. Working with other people, rather than alone.

Esteem Needs

1. Being respected by friends and co-workers. 2. Having my work favorably evaluated by others. 3. Feeling that my good qualities are appreciated. 4. Feeling useful and necessary in the world.

Self Actualization Needs

1. Being spontaneous and open to new experiences. 2. Feeling myself growing and changing personally. 3. Being truly myself, never faking it. 4. Using my creative abilities and expressing myself.

Procedure

The paired comparison format was modified to allow for responses in percentages. This approach yields information concerning the intensity of choice between paired items and reflects the view that need fulfillment is on a continuous scale. For example, if respondents are presented the alternatives A & B and they value both items equally, they would mark 50 for A and 50 for B. If respondents view A as slightly more important than B they may answer 60/40 or, if they perceive a great difference in the relative potency the answer may be 90/10 or 100/0. Clearly the higher the percentage respondents give an item the greater its scored potency. To facilitate reponse a visual aid was used and subjects marked their choices at the appropriate point along the bar (see below).

A 100 90 80 70 60 50 40 30 20 10 0

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0 10 20 30 40 50 60 70 80 90 100 B

The use of the response bar resulted in scores that were ipsative in nature. To permit comparative analyses scores of 100 were converted to 5, 90 to 4, 80 to 3, 70 to 2, 60 to 1 and all scores 50 and below equalled 0. In computing an overall need score for an individual the 16 values for that need were summed together and divided by 16. This transformation lead to the result that each respondent received a single score for each need

level that was statistically independent of their other sources.

Results

The reliability of the inventory was evaluated by examining the degree of internal consistency between items designed to measure the same need. Correlations between items were calculated with the average intercorrelation obtained identified as the intraclass correlations. Results indicate that the average of the intraclass correlations of each set of needs were as follows: physical .52; safety .56; belongingness and love .61; esteem .65; and self actualization .63.

The mean potency of each need level was also determined, and the following potencies were obtained: physical 0.702; safety 0.980; belongingness and love 1.036; esteem 1.195; and self-actualization 1.156. An analysis of variance revealed these differences between need levels to be significant $F(4,59) = 5.59$, $p < .003$.

Discussion

In general the inventory discriminates reasonably well between the various need levels. The overall score of the five need levels are significantly different from one another and need

level, as measured by the intraclass correlation, were significant and indicate that items at each level are measuring the same construct.

A somewhat puzzling finding is the potency of the esteem need for subjects. Further research with a larger and more varied sample may reveal whether this result is unique to the population studied.

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